



# **Communication Signal for Rapid Shutdown Specification Member's Briefing**

November 1, 2017

# Agenda

- Antitrust and intellectual property policy
- SunSpec Communication Signal for Rapid Shutdown Specification overview
- SunSpec Membership Agreement intellectual property (IP) addendum
- "Necessary Claims" & related information received from members

# Antitrust & intellectual rights policy

- All SunSpec meetings are conducted in accordance with the SunSpec Antitrust Policy and Intellectual Property Provisions defined in the SunSpec Member Agreement.
- Each participant company in this meeting has executed this agreement and all participants must comply with the policy and provisions.
- Confidential or proprietary information should not be discussed in open session. Please contact SunSpec management if you have any questions.
- If you have not already done so, does anyone in this meeting wish to disclose ownership of proprietary intellectual property pertaining to this specification at this time?

# SunSpec Communication Signal for Rapid Shutdown Specification (SCSRSS)

- An open, multi-vendor communication interoperability specification to support NEC 2017
- Applicable to inverters, modules, string combiners, and other components
- Supportive of NEC 2014, NEC 2017, and UL 1741 module-level rapid shutdown requirements
- Approved and published in July 2017



# **SunSpec membership agreement intellectual property (IP) addendum**

- Requires members to make “necessary claims” related to member-held Intellectual Property that is incorporated into SunSpec Specifications
- Requires members offer a license for “claimed” IP to others under Reasonable and Non-Discriminatory (RAND) terms
- “Reasonable and Non-Discriminatory” does not imply free

# Necessary Claims and other information related to SCSRSS intellectual property

- Necessary Claims
  - SolarEdge responded in writing indicating a number of claims
  - Tigo Energy responded in writing indicating a number of claims
  - Texas Instruments responded verbally that it will be submitting claims
  - SMA responded verbally that it may submit claims and that it would be willing to offer a royalty-free license under certain conditions
- Negative declarations
  - Fronius responded in writing indicating that it has no claims
- Related information
  - Japanese patent office rejected application for a rapid shutdown signaling patent stating that some purported claims were obvious
  - Application:  
<https://worldwide.espacenet.com/publicationDetails/biblio?CC=JP&NR=2011507465A&KC=A&FT=D&ND=1&date=20110303&DB=&locale=>
  - Rejection:  
<https://register.epo.org/ipfwretrieve?apn=JP.2010537134.A&lng=en>
- SunSpec policy is to avoid proprietary IP to ensure royalty-free specifications
- SunSpec had never received a claim for any specification prior to SCSRSS

# SolarEdge Claims

- U.S. Patent No. 8,013,472 – Claims 8 and 12
- U.S. Patent No. 8,035,249 – Claims 1 and 11
- U.S. Patent No. 8,427,009 – Claims 1, 13, and 25
- U.S. Patent No. 8,531,055 – Claims 1 and 13
- U.S. Patent No. 8,587,151 – Claims 1 and 6
- U.S. Patent No. 8,669,675 – Claims 1, 6, 11, and 16
- U.S. Patent No. 8,816,535 – Claims 1 and 14
- U.S. Patent No. 8,947,194 – Claims 1, 13, and 16
- U.S. Patent No. 9,112,379 – Claims 1 and 2
- U.S. Patent No. 9,401,599 – Claims 1 and 7
- U.S. Patent No. 9,438,035 – Claims 1 and 4
- U.S. Patent No. 9,590,526 – Claims 1, 6-8, 12, and 14-16

# Tigo Claims

- U.S. Patent No. 7,884,278 – claims 1, 5
- U.S. Patent No. 8,271,599 – claims 1, 9
- U.S. Patent No. 9,124,139 – claims 1, 10, 16
- U.S. Patent No. 8,854,193 – claims 1, 14, 19
- U.S. Patent No. 9,377,765 – claims 1, 14, 20
- U.S. Patent No. 8,933,321 – claims 1, 12, 19
- U.S. Patent No. 8,823,218 – claims 1, 15, 18
- U.S. Patent No. 9,397,612 – claims 1, 7, 14
- U.S. Patent No. 8,653,689 – claims 1, 10, 18, 20
- U.S. Patent No. 8,325,059 – claims 1, 14, 19
- U.S. Patent No. 9,143,036 – claims 1, 8, 18
- U.S. Patent No. 8,274,172 – claims 1, 9, 17
- U.S. Patent No. 9,007,210 – claims 1, 13



# Proposed action plan

- Incorporate Necessary Claims statement into SCSRSS license terms
- Convene SCSRSS workgroup to resolve issue
  - Remove offending material from specification
  - Determine cross-licensing terms
  - Other
- Solicit funding for go-to-market program



## Questions?

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